



## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION N	O. F.	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,583	10/007,583 12/05/2001		Ralf Bertram	DE920010035US1	3541
46583	7590 10/10/2006			EXAMINER	
		ERNSTEIN, P.L.C	·	SHERR, CRISTINA O	
	1950 ROLAND CLARKE PLACE RESTON, VA 20191			ART UNIT	PAPER NUMBER
	,			3621	

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

S

	Application No.	Applicant(s)
	10/007,583	BERTRAM ET AL.
Office Action Summary	Examiner	Art Unit
	Cristina Owen Sherr	3621
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period we Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	86(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days fill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE.	ely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).
Status		No.
1) Responsive to communication(s) filed on 29 No	ovember 2005.	•
2a) This action is <b>FINAL</b> . 2b) ⊠ This	action is non-final.	
3) Since this application is in condition for allowant closed in accordance with the practice under E	·	
Disposition of Claims		
4)⊠ Claim(s) <u>1-14</u> is/are pending in the application.	•	·
4a) Of the above claim(s) is/are withdraw	•	
5) Claim(s) is/are allowed		
6)⊠ Claim(s) <u>1-14</u> is/are rejected.	continue with an i	ing the second s
7) Claim(s) is/are objected to.	The transfer of the transfer o	
8) Claim(s) are subject to restriction and/or	election requirement.	
Application Papers		
9) The specification is objected to by the Examine		الما الما يوليا الما الما يوليا ا الما يوليا الما يوليا
10) The drawing(s) filed on is/are: ˌa) acce	epted or b) objected to by the E	zaminer.
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	37 CFR 1.85(a).
Replacement drawing sheet(s) including the correcti	ion is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.
Priority under 35 U.S.C. § 119	•	
12)☐ Acknowledgment is made of a claim for foreign	nriority under 35 H S C & 119(a)	-(d) or (f)
a) All b) Some * c) None of:	priority under 35 O.S.C. § 1.19(a)	-(d). Or (1)
1. Certified copies of the priority documents	s have been received	
2. Certified copies of the priority documents		on No.
3. Copies of the certified copies of the prior	* *	
application from the International Bureau	•	,
* See the attached detailed Office action for a list	of the certified copies not receive	d.
	•	
	See	
Attachment(s)	•	
1) Notice of References Cited (PTO-892)	4) Interview Summary	
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> </ul>	Paper No(s)/Mail Da 5) Notice of Informal Pa	te atent Application (PTO-152)
Paper No(s)/Mail Date	6)  Other:	Shungari ( 12 10m)

Art Unit: 3621

Page 2

#### **DETAILED ACTION**

This communication is in response to applicant's amendment filed July 13, 2006.
 Claims 15-19 are newly added. Claims 1-19 are currently pending in this case.

### Response to Arguments

2. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

### Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oldale et al (US 2004/0054572).
- Oldale discloses a computerized method for generating a recommendation of an item to an advisee, comprising the steps of: receiving a recommendation request comprising a selected item list from an advisee for a recommendation by a recommendation system (e.g. par 342); (note that if a user is requesting a recommendation, the recommendation must somehow be received, and that no one asks for a recommendation in a vacuum, but rather asks for a recommendation on a type or list of items, such as apples, history books, or romantic movies);

Provided in 1986 In the Charles being uppraised as a

Page 3

Application/Control Number: 10/007,583

Art Unit: 3621

in response to the recommendation request, computing a plurality of similarity factors based on at least one advisee profile from at least one newly rated item and determining which at least one user has already rated the item, wherein the advisee profile comprising a plurality of records, each record including a user identifier, an item identifier, and a rating value, such that each record is linked in a first and a second dimension (e.g. par 0069); and items from the selected item list that indicate similarity between the advisee and a

and items from the selected item list that indicate similarity between the advisee and a plurality of users of the recommendation system who have previously provided ratings of items from the selected item list (e.g. par. 0004)

selecting, from the plurality of users of the recommendation system, neighboring users to the advisee, according to the similarity factors (e.g. par 0082);

generating a recommendation of at least one item of the selected item list items, according to the previously provided ratings of the at least one item plurality of items by the neighboring users (e.g. par 0082, 0105).

- 6. Oldale does not utilize identical terminology with respect to the instant case, referring to shopping cart, for example and maps of similar items, and only one aspect or embodiment of Oldale is thus a computer-implemented method of recommending a items to a user. However, it would be obvious to one of ordinary skill in the art to adapt the invention in Oldale for the uses in the instant invention in order to facilitate sales.
- Oldale discloses the method of claim 1, wherein all items upon which the step of computing depends are included in the selected item list (e.g. par 0082, 0085).

on it falls lide to another manufactor to respect to the incount carre,

Art Unit: 3621

### Regarding claim 3 –

Oldale discloses the method of claim 2, wherein the recommendation of at least one item includes only items that are included in the selected item list (e.g. par 0085).

### 9. Regarding claim 4 -

Oldale discloses the method of claim 1, wherein the step of selecting neighboring users excludes, any user whose similarity with the advisee is below a predetermined threshold (e.g. par 0069, 0005).

### 10. Regarding claim 5 -

Oldale discloses the method of claim 1, wherein the step of computing and the step of selecting are executed substantially in parallel by inserting each newly computed similarity factor into a neighbor list in decreasing order of similarity and by limiting length of the neighbor list by excluding a user with lowest similarity if otherwise the neighbor list would exceed a predetermined length (e.g. par 0005).

## 11. Regarding claim 6 -

Oldale discloses the method of claim 1; further including the step of caching identifiers of the neighboring users, associated similarity factors, and time stamps (e.g. par 0420).

- 12. Although Oldale does not utilize exactly the same criteria for filtering out users as in the instant case, it would be obvious to one of ordinary skill in the art to adapt Oldale by merely choosing different criteria or characteristics.
- 13. Regarding claim 7 –

Oldale discloses a user profile for a recommendation system, comprising a plurality of records, each record including a user identifier, an item identifier, and a rating value,

a producer miled length (e.g. pur 0005).

Application/Control Number: 10/007,583 Page 5

Art Unit: 3621

wherein each record is linked in a first and a second dimension, the first dimension linking records with a same user identifier in a sequence according to the item identifier, and the second dimension linking records with a same item identifier in a sequence according to the user identifier (e.g. par 0463).

- 14. As above, although Oldale does not utilize exactly the same criteria for filtering out users as in the instant case, it would be obvious to one of ordinary skill in the art to adapt Oldale by merely choosing different criteria or characteristics.
- 15. Regarding claim 8 -

Oldale discloses a computerized method for generating a recommendation of an item to an advisee, comprising the steps of receiving recommendation request comprising a selected item list from an advisee for the recommendation by a recommendation system (e.g. par 0342); in response to the recommendation request, computing a plurality of similarity factors based on at least one advisee profile from at least on newly rated item and determining which at least one user has already rated the item (e.g. par 0069); selecting a first set of users from a group of users of the recommendation system based on the selected item list (e.g. par 0004), selecting neighboring users from the first set of users based on similarities between the advisee and each member of the first set of users (E.G. PAR 0004); and generating a recommendation of at least one item from the selected item list based on ratings provided by each neighboring user (e.g. PAR 0082, 0105).

16. Oldale does not utilize identical terminology with respect to the instant case, referring to shopping cart, for example and maps of similar items, and only one aspect

เราะสรายตา a group or use. Totale recommunication by the pased

Art Unit: 3621

or embodiment of Oldale is thus a computer-implemented method of recommending items to a user. However, it would be obvious to one of ordinary skill in the art to adapt the invention in Oldale for the uses in the instant invention in order to facilitate sales.

#### 17. Regarding claim 9 -

Oldale discloses the computerized method of claim 8, wherein the similarities are determined from an advisee profile and user profiles, and the advisee and user profiles are based on advise and user behavior including at least one of buying pattern, item ratings, bookmarked websites, website usage pattern, and user action relative to a particular item (e.g. par 163).

- 18. As above, although Oldale does not utilize exactly the same criteria for filtering out users as in the instant case, it would be obvious to one of ordinary skill in the art to adapt Oldale by merely choosing different criteria or characteristics.
- 19. Regarding claim 10 -

Oldale discloses the computerized method of claim 9, wherein an advisee profile or a user profile is updated when a new piece of information is added thereto (e.g. par 163).

20. Regarding claim 11 - Wasser and to the only see and to a profine

Oldale discloses the computerized method of claim 8, further comprising assigning a confidence factor to each advisee profile and each user profile, wherein the confidence factor is based on the combined effect of selected pieces of information recorded in a user or advisee profile (e.g. par 0175).

21. Regarding claim 12 -

Page 7

Application/Control Number: 10/007,583

Art Unit: 3621

Oldale discloses the computerized method of claim 8, further including determining similarities between the advisee and each member of the first set of users after receiving a selected item list from the advisee (e.g. par 0005).

### 22. Regarding claim 13 -

Oldale discloses the computerized method of claim 8, wherein a member of the first set of users is selected as a neighboring user if the similarity between the advisee and the member of the first set of users is better than a predetermined threshold (e.g. par 0005)

### 23. Regarding claim 14 -

Oldale discloses the computerized method of claim 8, further comprising assigning a weight to each neighboring user where the weight is greater for a neighboring user have greater similarity to the advisee and the weight is lower for a neighboring user having a lower similarity to the advisee (e.g. par 0069).

# 24. Regarding claims 15-17 – Regarding claims 15-17

Oldale discloses updating the selected neighboring users each time a new rating is entered or inferred during the recommendation request (e.g. par 0031, 0032, 0033, 0039).

# 25. Regarding claims 18-19 -

Oldale discloses having the selected neighboring users be users who have a similarity factor which is better than a predetermined threshold value (e.g. par 0004, 0005, 0447, 0509, fig. 6).

26. Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant.

tion asitem

and the commission of the property of the contract of the cont

Art Unit: 3621

Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may be applied as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention as well as the context of the passage as taught by the prior art or disclosed by the examiner.

#### **Conclusion**

- 27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 28. Linden et al (US 6,266,649) disclose collaborative recommendations using itemto-item similarity mappings.
- 29. Smith et al (US 6,853,982) discloses content personalization based on actions performed during a current browsing session.
- 30. Petra et al (US 2004/0205065) discloses a system for creating and maintaining a database of information utilizing user opinions.
- 31. Linden et al (US 6,912,505) discloses use of product viewing histories of users to identify related products.
- 32. Petras et al (US 2001/0047290) discloses a system for creating and maintaining a database of information utilizing user opinions.
- 33. Amazon.com catapults electronic commerce to next level with powerful new features (Amazon News release, Sept. 23, 1997).
- 34. Epinions.com buying guide.

Art Unit: 3621

Friday.

- 35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cristina Owen Sherr whose telephone number is 571-272-6711. The examiner can normally be reached on 8:30-5:00 Monday through
- 36. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew J. Fischer can be reached on 571-272-6779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
- 37. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cristina Owen Sherr

09/12/06

ANDREW J. FISCHER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

Page 9